



## ADVANCED RESEARCH PROJECTS AGENCY – ENERGY (ARPA-E)

<b>Leadership</b>	Dr. Arun Majumdar was confirmed by the U.S. Senate as the first agency director in October 2009. Prior to joining ARPA-E, Majumdar was the Associate Laboratory Director for Energy and Environment at Lawrence Berkeley National Laboratory, and a Professor of Mechanical Engineering and Materials Science and Engineering at the University of California, Berkeley.
<b>Creation</b>	Recognizing the need to re-evaluate the way the U.S. spurs innovation, the National Academies released a 2006 report, <a href="#"><i>Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future</i></a> , which included a recommendation to establish an energy research agency within the U.S. Department of Energy. The <a href="#"><i>America COMPETES Act</i></a> , signed into law in August of 2007, codified the creation of ARPA-E. The new agency received \$400 million for its initial budget in April 2009 through the American Recovery and Reinvestment Act.
<b>Focus</b>	ARPA-E focuses exclusively on high risk, high payoff concepts – new technologies that aim to provide demonstrated transformation in the ways we generate, store, and utilize energy. While other agencies in the U.S. Department of Energy also invest in energy research and development, ARPA-E uniquely looks for those technologies that other government agencies and the private sector do not and will not fund because of the nascent stage of technological development. ARPA-E is also equally focused on the commercialization potential resulting from each project.
<b>Mission</b>	To fund projects that will transform current energy technologies or develop new technologies to: <ul style="list-style-type: none"> <li>• Reduce America's dependence on foreign-source energy imports;</li> <li>• Reduce U.S. energy related emissions, including greenhouse gasses;</li> <li>• Improve energy efficiency across all sectors of the U.S. economy, and</li> <li>• Ensure U.S. leadership in developing and deploying advanced energy technologies globally.</li> </ul>
<b>Programs</b>	ARPA-E is investing in 121 projects across seven program areas: <ul style="list-style-type: none"> <li>• Agile Delivery of Electrical Power Technology (ADEPT)</li> <li>• Batteries for Electrical Energy Storage in Transportation (BEEST)</li> <li>• Building Energy Efficiency Through Innovative Thermodevices (BEETIT)</li> <li>• Electrofuels</li> <li>• Grid-Scale Rampable Intermittent Dispatchable Storage (GRIDS)</li> <li>• Innovative Materials &amp; Processes for Advanced Carbon Capture Technologies (IMPACCT)</li> <li>• Other Projects (open solicitation)</li> </ul>
<b>Types of Project</b>	In a word, ARPA-E projects are: revolutionary. ARPA-E selects and funds projects that identify disruptive energy technologies that can make current technologies obsolete; thus finding solutions that do not exist in today's energy market. If successful, ARPA-E projects will dramatically change the energy landscape.
<b>Events</b>	<p><i>National Energy Innovation Summit</i> - Annual event to bring together all areas of the energy pipeline to share ideas for developing and deploying the next generation of advanced energy technologies.</p> <p>2010 – The inaugural event, held at the Gaylor National Harbor, attracted over 1,700 attendees, 40% of whom hold PhDs and include members of the scientific and research communities, investors, technology entrepreneurs, small businesses and large corporations with an interest in clean energy technologies, policymakers, government officials and Members of Congress. 2011 – The second annual event to be held Feb. 28 – March 2, 2011 at the Gaylor National Harbor.</p> <p><i>Regional Energy Innovation Forums</i> – Gathering of local researchers, entrepreneurs, investors, and policymakers to build momentum for advanced energy technologies in a geographic area. ARPA-E, in partnership with Arizona State University and the Kauffman Foundation, co-sponsored and organized the Southwest Energy Innovation Forum in Scottsdale, Arizona on Monday, October 18, 2010.</p>





## A LOOK INSIDE ARPA-E

ARPA-E brings a freshness, excitement, and sense of mission to energy research and development. **The agency attracts the best and brightest minds in the U.S.—those scientists, engineers, and business people with exceptional experience in their field—to serve as program directors, as well as those project teams selected for ARPA-E funding.**

ARPA-E's organizational structure is lean and flat. **This allows the agency to be nimble and make and act upon decisions with speed not found elsewhere in the government, especially in the area of research and development. ARPA-E's culture, infused throughout the agency, emphasizes integrity, excellence, openness, and debate.**

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## WHAT MAKES ARPA-E UNIQUE

ARPA-E's core values are the essential standards by which it operates and executes its mission. The distinctive culture the values create gives us our unique character. ARPA-E is:

### *Visionary*

Imagining “what could be” and seeking to find realistic market solutions to address the country's energy security needs; working at the frontier, pushing the promising ideas forward for the benefit of the nation; responding to the best new ideas in energy from wherever they arise.

### *Agile and Fast*

Moving with speed, rapidly identifying energy innovations and accelerating new technologies to market; responding to the needs of project teams and the ideas of our partners; maintaining flexibility in a rapidly changing environment and being a nimble, lean organization to eliminate the effects of traditional government bureaucracy. In short, ARPA-E is moving at the speed of business.

### *Dedicated to Excellence*

Recruiting top talent to find new energy innovations; driving results and accepting the responsibility to optimally invest and manage the resources entrusted to the agency; maintaining transparency and accepting and managing risk responsibly. ARPA-E Program Directors - who are the best and the brightest in their fields, are hired quickly and serve three year terms before returning to the private sector - actively manage all projects to ensure technical milestones are met timely and accurately. They also conduct regular site visits and review timelines to make certain tax payer dollars are used wisely and responsibly.

### *High-Impact*

Enhancing the economic and energy security of the U.S. while ensuring the country's technological lead in developing and deploying advanced energy technologies; through its investments, providing economic benefits and social improvements to the nation.

